

Please read all of the instructions before sampling.

Introduction

The objective of the second cycle of EPA's Unregulated Contaminant Monitoring Regulation (UCMR2) is to monitor the occurrence compounds that are not federally regulated in drinking water. Great Lakes Environmental Center (GLEC), under contract with EPA, is providing the sample kit(s) for the collection of UCMR2 samples at your facility.

This booklet provides you with step-by-step instructions for completing UCMR2 Assessment Monitoring sample collection at your utility. The sampling procedure is not difficult, but attention to detail is essential. If samples are not properly collected, packed and shipped, you will be required to resample.

About the Sample Kits

♦ You should receive at least one sample kit for each sample point at each facility. It's possible that you will receive an additional kit for one of your sample points. This second kit will provide the laboratory with additional sample volume for quality control purposes.



You should receive at least one sample kit for each of the sample points at your facility.

♦ Each kit bears a kit label on the side of the box with some important information, including he name and address of your facility, a unique kit number, and the specific sample point for the kit. If you have more than one sample point, it is **very important** that the proper kit is used for each sample point.



The kit label bears a unique kit number assigned to each sample point at your facility.

Upon Receiving the Sample Kits

Open one kit at a time. Leave the black foam cooler and plastic bag in the cardboard box. Simply fold open the plastic to access the top of the cooler.



The cooler and the plastic bag remain in the cardboard box throughout the sampling process. The zip-lock bag contains important documents.

♦ The zip-lock bag on top of the cooler contains important paperwork. The Sample Tracking Form and the FedEx label are specific to the kit and must not be mixed up with documents from other kits you may have received.



The kit number is printed on the sample tracking form and the FedEx label. These documents must stay with the proper kit.

♦ Locate the **Kit Checklist** which lists every item that should be in the kit. Remove the cooler lid and locate the various items in your sample kit. Remove the top freeze packs and then the top insert to access the inside of the cooler. Small items are packaged together in the zip-lock bag. As you locate each item, check it in Column #1 of the checklist. If you find that any kit items are missing or broken, please call GLEC immediately.



The top insert in the sample kit is removable. Note the location of the four freeze packs.



- ♦ Note the location of the four freeze packs in the cooler. You will be instructed to return the frozen packs to these same locations when packing the samples for shipment to the laboratory.
- ♦ Remove the four freeze packs from the kit and place them in a freezer for <u>at least 72</u> hours prior to collecting the samples.



IMPORTANT! The four freeze packs must be placed in a freezer at least 72 hours prior to sampling.

Collecting the Samples

- ♦ Samples must be collected during the week designated on the Sample Tracking Form. Samples should be collected on Monday, Tuesday, Wednesday, or, as a last resort, on Thursday. Samples may NOT be collected on Friday, Saturday, or Sunday. If for any reason you cannot collect samples during your specified week, please contact GLEC.
- ♦ If your facility does not have daily FedEx pick-up and you cannot deliver the collected samples to a FedEx shipping agent, please contact GLEC for special instructions.

- ♦ On the sampling day, check to see that the freeze packs are frozen solid. If they are not, do not collect the samples on that day.
- ♦ Collect the samples 1 hour before the time of your FedEx pick-up. If the samples are to be chilled, collect the samples 3-4 hours before your FedEx pick-up. (See the section: Chilling Samples on page 8.) Allow more time if you have multiple sample points.
- ♦ Verify that you have the correct kit for the sample point. If you are sampling more than one entry point, open only one kit at a time and completely finish the sampling procedure before moving on to the next kit.
- ♦ If the sample point has an aerator, a hose, or tubing on the tap, remove it prior to sampling. Let the water run for 10 minutes.



If the tap is equipped with an aerator, remove it before collecting samples.

♦ To collect the samples, reduce the flow from the tap to a slow but steady stream about the diameter of a pencil.



From a steady stream about the diameter of a pencil, fill the sample bottle to the neck but not overflowing.

- Wear the latex gloves while collecting the samples to avoid sample contamination. DO NOT RINSE OUT ANY OF THE SAMPLE BOTTLES, as they contain sample preservatives in powder form.
- ♦ Remove one bottle from the kit and write the sample date and your initials on the bottle label. Fill the bottle to the neck but not overflowing.
- ♦ Cap the bottle tightly and agitate the sample until all of the sample preservatives are dissolved. (Note: Some bottles may require several minutes of agitation before all preservatives are dissolved.)



With the sample bottle tightly capped, agitate until all the preservatives are dissolved.

♦ Repeat the process for the remaining three bottles and return all bottles to the kit.

Chilling the Samples

♦ If the weather or sample water temperature is warm, the samples should be chilled prior to shipping. If samples are received at the laboratory too warm, you will be required to resample. In general, chill the samples for 2-3 hours, preferably in a refrigerator, if the temperature of the samples or the outdoor air temperature is expected to exceed 60 degrees F.



During warm weather, samples need to be chilled for 2-3 hours before shipping.

♦ If a refrigerator is not available, samples may be chilled in a picnic cooler with cubed or crushed ice. Take extreme care to prevent the sample bottles from cracking or breaking. Gently surround the bottles with ice, close the cooler, and avoid moving the cooler once the bottles are in it. **DO NOT** use the freeze packs included in the sample kit to chill the samples. The freeze packs need to be kept in a freezer until the samples are packed for shipment.

Packing the Cooler for Shipping

♦ If samples have been chilled, return them to the designated openings inside the cooler approximately one hour prior to your FedEx pick-up (or your delivery of the samples to a FedEx shipping agent). If you have received more than one sample kit, **BE CERTAIN** that the correct sample bottles are returned to each kit. Refer to the kit number on the bottle labels and on the kit label.



IMPORTANT! If you have chilled the samples and you have more than one sample point, it is essential that the correct bottles are returned to each kit.

♦ Place two of the completely frozen freeze packs in the slots along the sides of the cooler. Place the top foam insert in position (grey side down) and place the other two freeze packs in the spaces provided in the insert. Place the lid on the cooler.



Return all four completely frozen freeze packs to their original locations inside the kit.

- ♦ Remove the Sample Tracking Form, the FedEx label, the Kit Checklist and the shipping tape from the plastic zip-lock document bag.
- ♦ Fill in all required information on the Sample Tracking Form including the sampling date, and sampler's name. Seal the Sample Tracking Form in the document bag.



The completely filled out Sample Tracking Form is sealed inside the zip-lock document bag.

- ♦ Refer to the Kit Checklist (Column #2) to make sure that all necessary items are re-packed in the cooler. Dispose of any items not listed in Column #2.
- ◆ Place the document bag containing the completed Sample Tracking Form on top of the cooler. Pull the plastic bag up around the cooler, and fold down the top of the bag.



Fold down the top of the plastic bag on top of the document bag and cooler lid. ♦ Close the cardboard box and seal it with the shipping tape provided.



Seal the box with the shipping tape. Use all the tape strips provided to insure the closure is secure.

♦ Remove the backing from the new FedEx label and affix it to the box directly over the old label on top of the box. Ignore the "Deliver by" date in the lower right hand corner of the label.



Remove the backing from the FedEx label and place it directly over the old label on the top of the box.

♦ Keep the sample kit(s) in a cool place until your FedEx pick-up or until you deliver it to a FedEx shipping location. Be sure the kit(s) is shipped the <u>SAME DAY</u> as the samples are collected. (Note: If your only FedEx pick-up is early in the morning, call GLEC for special instructions.) Now that you have completely read the instructions, if you have any questions, call GLEC at 231-941-2230 and ask for Erica Schneider,
John Bachman, or Patrick McCool.
Also, you can email at ucmr2@glec.com



Great Lakes Environmental Center

Under contract with EPA, GLEC provides implementation & monitoring support for the UCMR2 program.

